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Attorney Docket No. A-70143/RMS/AXG/JML

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Cynthia BRISCOE, et al.

Serial No.: 09/466,325

Filing Date: 17 December 1999

For: **Microchip Device and Array**

Examiner: B. SINES

Group Art Unit: 1743

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail addressed to the Assistant Commissioner of Patents, Washington, D.C. 20231 on 5 August 2002.

Signed

Todd V. LEONE

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**AMENDMENT**

Assistant Commissioner for Patents  
Washington, D.C. 20231

Sir:

Following is Applicants' response to the Office Action mailed 3 April 2002. A petition for one-month extension of time, and the appropriate fee, is enclosed. This response is filed on or before the extended due date of Monday, 5 August 2002, making this a timely response. Please amend the application as follows:

**IN THE CLAIMS**

Please amend claims 1, 16, and 33 to read as follows:

1. (Amended) An apparatus for performing parallel, independently controlled molecular reactions, comprising:

- (a) a substantially monolithic structure formed from a plurality of green-sheet layers sintered together, said green-sheet layers including particles selected from the group consisting of ceramic particles, glass particles, and glass-ceramic particles;
- (b) said substantially monolithic structure comprising a plurality of separate well structures separated by thermal insulating material;
- (c) a heater associated with each well structure,
- (d) a cooling element associated with each well structure, and
- (e) a temperature monitor associated with each well structure.

16. (Amended) The apparatus of Claim 15, wherein said metal wire resistive heater is integrated into said substantially monolithic structure.